

CLAIMS

What is claimed as being new and desired to be protected by LETTERS PATENT of the United States is as follows:

1. A door locking system for providing the user with a pick-proof lock comprising, in combination:

a structure having a door jamb to receive a door therein, the door jamb having a recess therein;

a door having an outside surface with a lock hole of a first diameter and an inside surface with a lock hole of a first diameter, the door having a passageway there through between the outside surface lock hole and the inside surface lock hole for the passageway of a locking mechanism, the door having an edge surface located between the outside surface and the inside surface, the edge being positionable against the door jamb in which the door is mounted;

a bolt receiving plate having a bolt aperture there through with the bolt hole being configured to coincide with and cooperate with the bolt aperture of the door jamb, the plate being configured as to be mounted on a recipient door jamb, the bolt receiving plate having a plurality of screw mounting holes there in;

a lock having an internal lock housing and an external lock housing and a bolt operating mechanism there between, the external lock housing having a round tapered exterior

configuration, the housing having an innermost portion and an outer portion, the innermost portion having a centrally located round tubular protrusion with a passageway there through and a round flat contacting surface, the protrusion being configured to be received by the lock hole in the outer surface of the door and to be contained there in, and the round flat contacting surface being configured to abut the outside surface of the door surface, the external lock housing having an internal tumbler mechanism and a rotatable key receiving shaft located therein, the key shaft having an interior end facing the inside of the door and an exterior end, the key shaft has a centrally located rectilinear aperture running there through, within, and coaxial with the key shaft, the internal lock housing of the lock having a round tapered exterior configuration, the housing having an innermost portion and an outer portion, the innermost portion having a centrally located round tubular protrusion with a lock handle shaft passageway there through and a round flat contacting surface, the protrusion being configured to be received by the lock hole in the inner surface of the door and to be contained there in, and the round flat contacting surface being configured to abut the inside surface of the door surface, the internal lock housing having a stepped rotating door handle shaft having a door end with a rectilinear recess and a handle end having a flattened handle receiving tip, the shaft having three exterior dimensions,

a first dimension being located within the housing on the door end and a second dimension being between the door end and handle end of the shaft and the third dimension being located on the handle end of the shaft, with the first dimension being greater than the second dimension and the second dimension being greater than the third dimension, the handle shaft being limitedly movable in an axial back and forth direction by a user, the handle shaft being rotatable in a plane perpendicular to the axial movement of the shaft, the handle shaft being aligned with and contained within the lock handle shaft passageway;

a handle being coupled to the handle shaft;

a pinion subassembly having an engagement plate and a biasing spring and a pinion gear and a gear shield, the engagement plate having a flat stepped configuration with an outer end and a gear end and a spring portion there between, the outer end having a squared flat end having a fourth dimension with a downwardly projecting rectilinear tooth having a fifth dimension, the spring portion having a spring nest there in for receiving and holding a biasing spring therein, the biasing spring urging the plate in an outwardly direction toward the outer surface of the door, with the gear end having a downwardly projecting rectilinear tooth having a fifth dimension and a squared flat inner end, the pinion gear having an outer portion and an inner portion with a toothed portion there between, the

pinion gear having a round hole having a fourth dimension there through, the outer portion of the pinion gear having a vertical slot sized to accommodate a fifth dimension cut there into with the slot sized to engage the downwardly projecting rectilinear tooth of the gear end of the engagement plate, the inner portion of the pinion gear having a two slots each perpendicular to the other, with one inner portion pinion gear slot being deeper than the other inner portion pinion gear slot, with both slots having a fifth dimension, the subassembly gear shield having a round slot cut there into and the gear shield having a hole there through, the hole having a diameter the size of the fifth dimension, the shield coupled to the innermost portion of the external lock housing;

a bolt comprising a shaft having a generally rounded cross sectional shape with a flat slotted area having a plurality of pairs of gear engagement recesses there into, the gear engagement recesses sized to receive and accommodate the toothed portion of the pinion gear, the bolt being slidably mounted in the door and configured to laterally slide between an unlocked orientation with the bolt being totally within the door and a locked orientation wherein the bolt extends from the door edge and engages the bolt receiving plate in the door jamb; and

a handle plate having a flat rectilinear configuration with a fifth dimension sized to be accepted by and accommodated by and

slidable within the rectilinear recess of the handle shaft of the internal lock housing, the handle plate having a protruding tooth, said tooth protruding toward and coaxial with the key shaft of the external lock housing.

2. A door locking system comprising, in combination:
a structure having a door jamb with a recess therein;
a door having an outside surface and an inside surface and a lock hole;
a bolt receiving plate having a bolt aperture and a plurality of screw mounting holes there in;
a lock having an internal lock housing having a handle and handle shaft and an external lock housing having a set of associated tumblers and a keyhole there into, the lock having a bolt operating mechanism comprising an engagement plate and a spring and a pinion gear and a gear shield and a handle plate and a bolt there between;
a handle being coupled to the handle shaft; and
a key sized to mate with the tumblers of the external lock housing.

3. The system as set forth in claim 2 and further including a handle plate biasing spring coupled to the internal housing and the handle plate.

4. The system as set forth in claim 2 wherein the outside of the door is devoid of a keyhole.

5. The system as set forth in claim 2 further comprising:

a handle shaft having a radial recess there in;

an interior housing having a radially located and oriented locking member, the locking member being a radially oriented rod slidably mounted in the interior housing with a tip biased by a spring into contact with the handle shaft recess to be received by and mated with the handle shaft recess thereby preventing rotation or axial movement of the handle shaft.

6. The system as set forth in claim 2 further comprising:

a bolt receiving plate having a second bolt aperture there in;

a bolt having a rod hole therein;

a supplemental bolt mounted in the door and configured to laterally slide between an unlocked orientation totally within the door and a locked orientation exterior of the door and extendable into the second bolt aperture in the bolt receiving plate, the supplemental bolt having a spring biasing the supplemental bolt to the locked orientation, the supplemental bolt also having an interior knob for unlocking the supplemental bolt from the inside and an exterior knob for unlocking the supplemental bolt from the outside, the system also including a rod located on the interior surface of the door, the rod being slidable and perpendicular to the supplemental bolt, the rod

engaging the rod hole in the bolt to prevent movement of the bolt.